infant Saviour was brought by his parents to avoid the persecution of Herod. Egyptian hieroglyphics, in which the characters are taken from visible objects, are the earliest form of writing; and the Hebrew and Greek alphabets were both borrowed from them. Egypt taught the world the use of paper—made from its rush, the papyrus. In Egypt was made the first public library, and first college of learned men, namely, the Alexandrian Museum. There Euclid wrote his 'Elements of Geometry,' and Theocritus his Poems, and Lucian his 'Dialogues.' The beauty of Cleopatra, the last Egyptian queen, held Julius Cæsar, and then Marc Antony, captive. In Egypt were built the first monasteries; the Christian fathers Origen and Athanasius lived there; the Arian and Athanasian controversy began there."

The buildings which remain are the oldest in the world—some of them the largest; the country was the first civilised: it was the parent of Greek science and art. With such a subject, the artists we have named could scarcely fail to produce a fine work, and they have fully justified the anticipation. If we have anything to regret, it is that greater advantage was not taken of some of the buildings,—that is, we would have had them leave the actual banks of the river for brief intervals, so as to take the spectator more closely to the colossal and mysterious ruins, now sometimes represented at a distance. We found this regret on the beauty and efficiency of those parts of the panorama where the monuments *are* represented in the foreground; as, for example, "the Sitting Statues," the rock-cut temples of "Abou Simbel," the "Second Pyramid," and the "Sphinx;" but we do not intend it to modify our praise of the very charming and instructive painting (accompanied as it is, too, by a running commentator,) which Messrs. Warrep, Bonomi, and Fahey, have produced.

PROPOSED CHURCH, SANDFORD DISTRICT, CHELTENHAM.

Sir,—My attention has been drawn to an article in The Builder of the 14th instant, headed "Architectural Competition: Proposed Church, Sandford District, Cheltenham," and signed "Raphael Brandon," to which, as it conveys a direct insult to the committee, of which I am honorary secretary, I must trouble you with a few remarks in reply.

Mr. Brandon first refers to the amount for which the church is to be built, viz., 4,000*l*. "This," says he, "is simply an impossibility. To build a church, as a church should be built, in the severest manner, would cost at least 6,000*l*." Mr. B. gives no data for coming to this conclusion; it is simply his *ipse dixit*. Has Mr. B. inquired the price of materials, &c., in our neighbourhood, or does he fix 6,000*l*. as his minimum for a church, without reference to attendant circumstances?

Mr. Brandon then proceeds to question the *bona fides* of the committee, by suggesting that they have some favourite architect in view, &c. &c. What ground has he for this assertion, and whence does he draw his conclusions? I can only imagine that he takes himself as the standard by which to judge others. For the sake of brevity I pass over many irregular statements of Mr. Brandon, and proceed to where he quotes the instructions of the Cheltenham committee, at this point:—"In case the building shall not be commenced within twelve months after notice to the architect that his plans are approved, he shall be entitled to receive for his plans, designs, and drawings, the sum of 50*l*., and no more, in full discharge of all claims for such plans, &c., which are then to become the property of the committee;" which he interprets thus: "They have only to delay a twelvemonth to become entitled to a full set of working drawings and specifications, together with the design itself, for the sum of 50*l*." Now it is possible that such an inference may be drawn upon a prejudiced perusal of the instructions, but is it likely that a respectable body of men would act in the manner implied above?

I do not agree with his view respecting the advantages of a competition; but, without entering into this point, I see no ground for the opinion formed by Mr. Brandon as to the conduct of the Cheltenham committee. They have honestly stated their requirements, and thus given an opportunity to those who disapproved of the instructions to abstain from the competition. Supposing the committee had left several points open,—the architect would have omitted them in his calculations, and his design would have been cast out as not coming within the compass of the means in the hands of the committee, and all for the want of the very instructions which Mr. Brandon calls so extraordinary. It being at the option of Mr. B. to enter into the competition, his proper course would have been to apply to the committee, or myself, for an explanation, instead of imputing base motives and misconstruing their instructions. The several interviews I have had with architects, under these instructions, convince me that to build a good substantial church, such as required, for 4,000*l*. is not the impossibility stated by Mr. Brandon; and also that others have not understood the passage referring to the architect's compensation in the unfair manner in which he interprets it.—I am, &c.,

Cheltenham. J. Rees Philipps.

CAST ZINC IN DECORATION.

M. Geiss, of Berlin, has been exhibiting specimens of zinc used for architectural and decorative purposes in a mode not hitherto employed amongst us,—namely, *cast*. It appears that for seventeen years, zinc has thus been used in Berlin for architectural purposes, namely, for all exterior as well as interior ornamental parts of buildings, which, by casting, can be produced in the sharpest forms, and are said to be at the same time capable of resisting all influence of the weather. Columns, capitals, consoles, acroteria, cornices, dressings for doors, balconies, vases, statues, &c., can be formed of zinc.

The late distinguished architect, Schinkel, thus writes on the subject:—

"The cast metal offers particular advantages from its greater strength in comparison with rolled zinc, from its being less subject to the influence of temperature, and from its capability of receiving the finest impressions by casting, for which reasons it seems most adapted for all plastic works of art.

"We see, therefore, already, large statues, copies of antiques, in the atelier of M. Geiss, at Berlin, executed in the most elaborate style: to which statues, by a precipitate of copper, an excellent imitation of copper can be given. All ornaments of carved work and projecting members forming perforations, and crowning members, are capable of being executed of this metal in the easiest way. At the same time the more important parts of building can be made very cheap and durable. We have recently finished a large restoration of our university, in which about 1,600 feet of cornice, with modillions, have been cast in zinc, which was fastened to an iron framework, and which, instead of 16 dollars per foot if in stone, cost in zinc only 9 dollars, including the iron framework.

"The many advantages which zinc offers for the construction of furniture, as vases, candelabra, basins, &c. &c., which in the open air are less exposed to damage than stone, and for the clothing of rough iron supports, with the elegant forms of columns and consoles, dressings for doors, and richly ornamented architectural members, show clearly the extent of its extreme usefulness, and will render it in future indispensable for architecture, contributing at the same time more and more to the extension of architecture itself."

With reference to a remark recently made in our pages as to the effect of sea air and coal smoke on the ordinary rolled zinc, the agent of the Vieille Montagne Zinc Company has addressed a communication to us, wherein he says:—"I would refute the erroneous and generally received idea in this country, that zinc (pure zinc at least), corrodes when exposed to the sea air or spray on coasts, or in countries where coal is the predominant fuel. Wood yields such gases no less abundantly than coal, and yet zinc is admitted to stand well in the inland districts of France, where wood is used as fuel!

As regards the borders of the sea, if it does not stand equally well there, how does it happen that the zinc roofs of the large sheds at Amsterdam and Rotterdam, for building men of war, have stood the test of such exposure for at least twenty years?

Witness, too, the large shed of the great arsenal at Flushing, the large prison at Cherbourg, the barracks and railway stations at Boulogne-sur-Mer and at Havre, and other buildings in various other sea ports."

It is asserted, and our manufacturers should look to this, that British zinc is less pure than that used abroad.

THE WORD OF THE LAW *versus* THE SPIRIT.

LIVERPOOL BUILDING ACT.

A few days ago Mr. Robinson, building surveyor, appeared at the Police-court, in Liverpool, to substantiate an information against Mr. Wells, builder, for placing the purlins in the roof of a church now in course of erection in Sackville-street, of less dimensions than are required by the Act of Parliament. Mr. Robinson said the bearings of the purlins to the roof of the church were fourteen feet. With a slight variation they were 6 feet 6 inches apart. The Act prescribed that these purlins, if more than 6 feet apart, should be 7 inches by 9 inches. Mr. Bell, solicitor, who appeared for the defendant, wished to show that by the timber used there was a greater amount of strength than if they had strictly adhered to the provisions of the Act; and, in addition to this, that strength had been gained by the great pitch of the roof. This was not denied. After some conversation, Mr. Rushton, the magistrate, said it was clear to him, from the explanations given, by the aid of several models which had been brought into court, that the roof was much stronger than if made with a less pitch, and a different description of wood, as the Act made no mention of the kind of wood to be used, but merely the dimensions, but he regretted to say the Act allowed him no discretion in the matter. The question was, how it could be altered with the least possible cost? Surveyor—By nailing a piece upon the purlin. This was considered a bad precedent by the magistrate; but, after some demur, Mr. Rushton said that the case was one of an unusual nature, and that as his province was more particularly to see to the safety of the public, the suggestion might be taken into consideration. However, he would adjourn the case, in order that the surveyor might have time to communicate with Mr. Hay, the architect, and see what would be the best course to adopt. The architect, who was virtually the defendant in the case, in the course of his examination, showed that a piece of timber, according to the size used, namely, 10 inches by 6 inches, by Tredgold's formula, proved, by actual experiment, was stronger than a piece of timber cut to scantling of 9 inches by 7 inches, which contained a greater quantity of timber, but complied with the Act. The same piece of timber cut out of Baltic (of which the whole of the roof is constructed), would have required a weight of 23,357 lbs. to break it, and a purlin 9 inches by 7 inches, as required by the Act, and which would have been permitted of yellow pine, would only have required 13,365 lbs. to break it. Mr. Hay further contended that the basis of the triangles were the real bearings of the respective roofs—the roof in question being at a pitch of 58°, the other, as allowed by the Act, of 27°. That for a square of roofing of the first, it would have required 318 tons 1 cwt. 5 lbs. to break the timber, whereas the latter would yield to a pressure of only 20 tons 18 cwt.

Street Crossings.—When detained with other foot passengers at the crossings of some of our principal streets, by a long string of carriages or carts, it has often struck me as very desirable that the inconvenience, and I may add danger, of many of these crossings, might, and indeed ought to, be obviated in situations where the width of the way would allow of its being done), by the erection across the streets, of light bridges for foot passengers, to whom much valuable time would then be saved, and their lives and limbs rendered more secure from accidents, and these erections might also be rendered very ornamental to our streets.—W. C. Trevelyan, Athenæum Club.

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